

August 2025

Walla Walla County Voluntary Stewardship Program

Two-Year Status Report

For the Walla Walla County Board of County Commissioners and the Washington State Conservation Commission

Prepared by the Walla Walla County Conservation District in cooperation with the Walla Walla County VSP Work Group

Acronyms Used in the Report

BMLT: Blue Mountain Land Trust

BMP: Best Management Practice

CARA: Critical Aquifer Recharge Area

CBP: Commodity Buffer Program – Harvestable buffer program started by Spokane CD

CREP: Conservation Reserve Enhancement Program – Farm Service Agency Program for riparian buffers

CRP: Conservation Reserve Program – Farm Service Agency Program for native grass establishment

CSRIA: Columbia Snake Rivers Irrigator Association

CTUIR: Confederated Tribes of the Umatilla Indian Reservation

DNR: Department of Natural Resources

ECY: Washington Department of Ecology

FEMA: Federal Emergency Management Agency

FSA: Farm Service Agency

GHA: geologically hazardous areas

GIS: Geographic Information system

HEL: highly erodible land

LiDAR: Light Detection and Ranging

NOAA: National Ocean & Atmospheric Association

NRCS: Natural Resource Conservation Service

PHS: Priority Habitat Species

SCC: State Conservation Commission

TSS: Tri-State Steelheaders

USDA: United States Department of Agriculture

USFWS: United States Fish and Wildlife Service

USGS: United States Geological Survey

VSP: Voluntary Stewardship Program

WDFW/DFW: Washington Department of Fish and Wildlife

WRIA: Water Resource Inventory Area

WSDA: Washington State Department of Agriculture

WSU: Washington State University

WWBWC: Walla Walla Basin Watershed Council

WWCC: Walla Walla Community College

WWCCD: Walla Walla County Conservation District

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Introduction

The Voluntary Stewardship Program (VSP) promotes the idea that complex environmental problems can be addressed through voluntary cooperation rather than regulation under the Growth Management Act (The William D. Ruckelshaus Center, 2010). After Walla Walla County opted into the new VSP and the legislature funded the program in 2015, the Walla Walla County Board of County Commissioners contracted with the Walla Walla County Conservation District (WWCCD) to administer the program (RCW) 36.70A.720(1)(f). The Walla Walla County VSP Work Plan was approved in November 2017. A 5-Year Status Report was submitted to the Washington State Conservation Commission (SCC) in Spring of 2021. Technical Panel members partially agreed that WWCCD met its VSP goals and monitoring requirements. General feedback for improvement included that the VSP needed to be specific on measurable benchmarks and metrics to prove that critical areas are being protected and enhanced. The 2021-2023 Walla Walla County VSP 2-year report navigated many of these suggestions. Adaptive management for the Walla Walla County VSP Work Plan was approved by the VSP Work Group in December 2023 and March 2025. The Walla Walla County VSP Monitoring Plan was submitted to the SCC in June 2024 and factored in comments from the 5-year Status Report.

WWCCD worked closely with partners and the VSP Work Group to improve the VSP Work Plan and monitoring. This 2-year Status Report includes detailed information to fulfill the state requirements outlined under the Revised Code of Washington (RCW) 36.70A.720(1)(j)(l) and provide a periodic evaluation of the effectiveness and accomplishments of the Walla Walla County's VSP Work Plan in meeting the purpose and intent of VSP (RCW 36.70A.700(2)). This report is prepared for sharing with Walla Walla County, the SCC, partnering agencies, and the public. This report addresses the following:

- Efforts taken to protect critical areas while maintaining ongoing agricultural activities through voluntary, non-regulatory approaches,
- Strategies to support long-term agricultural viability and prevent the conversion of farmland to other uses,
- Coordination among existing programs and partnerships at the local, tribal, state, and federal levels to achieve shared goals,
- Actions that promote ecosystem stewardship and compliance with environmental laws protecting water quality and fish habitat.

Summary tables and supplementary report references are at the end of the report. Contact the WWCCD ((509)-956-3777, info@wwccd.net) to receive full copies of reports.

Agriculture Viability: How Walla Walla VSP is Helping Agriculture

The Walla Walla County VSP Work Group defined Agriculture Viability as “the ability of farmers and ranchers to maintain an economically successful agricultural business, keep the land in agriculture long-term, and sustain the land so it will remain productive into the future”. VSP partners helped maintain agricultural viability in the county this biennium by acting as a liaison between regulatory agencies and implementing projects. The WWCCD conducted several meetings to educate farmers and ranchers on changing pesticide use regulations, water quality concerns, water conservation, and air quality.

Stream Restoration Projects

Between 2023 and 2025, WWCCD submitted applications for eight stream restoration projects (Touchet RM35 Implementation, Touchet RM33 Design, McDonald, Swegle, Walla Walla RM20, Touchet RM42 Implementation, Coppei C7, Mill Creek Floodplain by Design). Stream restoration projects help address landowner erosion concerns to keep agricultural land intact, while also improving water quality and providing fish habitat and passage. Between 2023 and 2025 five stream restoration projects were completed (Coppei 7, Dry Creek, WWRM35.5, Mill Creek RM17, Coppei Creek Bridge). In the County, partners are working on at least 4 additional stream restoration projects.

Conservation Easements

The Blue Mountain Land Trust (BMLT) has worked to protect lands and waters in the Blue Mountain region for people, agriculture, and wildlife for over 25 years (Blue Mountain Land Trust, *Our Story*). Before 2011, BMLT had protected about 230 acres of agricultural land through permanent conservation easements. Since 2011, they have protected an additional 831 acres of agricultural land resulting in a cumulative total of 1,060 acres in conservation easements. During the 2023-2025 biennium, they acquired one new conservation easement which consisted of 16.3 acres of agricultural land, 0.3 stream miles, and 5.2 acres of riparian/wetland area (A. Addressi, personal communication, March 28, 2025). In 2025, BMLT also purchased an 11.53-acre farm with long term plans to protect it from encroaching development, ensuring the farm's long-term viability (Martinez Neumann, 2025).

While BMLT contributes to agricultural viability in Walla Walla County through conservation easements and property acquisitions, it also helps to protect critical areas. Easements purchased with funding from the NRCS ACEP-ALE Program require farming provisions to conserve soils that have been assessed as Highly Erodible Land (HEL). Large portions of Walla Walla County face concerns of erosion and fall into either the critical area Geologically Hazardous Areas (GHA): Wind/Water Erosion or GHA: Steep slopes/Landslides. Since 2021, nearly 576 acres of HEL-designate agricultural land have been protected by BMLT in conservation easements (A. Addressi, personal communication, March 28, 2025). These easements can also safeguard wildlife habitat by preserving migratory corridors and habitats of native plants and animals.

Table 1. Acres in conservation easements in Walla Walla County. Information provided via email communication from Blue Mountain Land Trust (A. Addressi, personal communication, March 28, 2025).

Acres in Conservation Easements (Blue Mountain Land Trust)			
	Before 2011	2011-Present	Total
Total Agricultural Acres	229.5	831.3	1060.85
Upland Habitat Acres	67	266	333
Riparian/Wetland Acres	51.4	79.2	130.6
Stream Miles	2.18	3.72	5.9
Total Protected Acres	353.16	1215.8	1568.96

CRP Status Reviews

CRP grasslands were installed beginning in the mid 1980's with a 'certified live seed' mix of 3 to 6 species. Over time, select species became dominant and the species diversity diminished. Much of Walla Walla County CRP grasslands were installed on highly erodible land (HEL) such as steep slopes or friable (fragile) soils. While habitat conditions may be an ancillary benefit, CRP is for protection of soil as it pertains to erosion. USDA guidelines indicate no more than 25% of harvestable agricultural land may be enrolled in CRP.



Figure 1: Example of a CRP Field in Walla Walla County

Between 2023-2025, over 14,000 expiring CRP acres were reviewed in Walla Walla County to assess current condition for re-enrollment consideration (Farm Service Agency, 2021). This equates to nearly 2% of total land acres in Walla Walla County. Re-enrollment is based on many factors including soil rental rates, species diversity at the time, USDA Farm Bill rules, and private property owner's objectives and voluntary willingness to enter a 10- to 15-year federal contract. Status reviews help keep agriculture viable in the county because they inform both the Farm Service Agency (FSA) and the landowner about what type of vegetation is present in a CRP field. While CRP protects soil for agriculture viability, these grasslands also help protect Critical Areas such as Geologically Hazardous Areas, Upland Fish and Wildlife Habitat, and to a lesser degree Wetlands.

In general, throughout Walla Walla County, field assessments and right-of-way observations indicated the diversity of grass species has reduced to one or two species and weed species have encroached which increased fuel load/ fire potential. Dominant native species included Sherman Big Bluegrass, Blue bunch Wheatgrass and to a lesser extent in wetter areas Great Basin Wildrye. South facing slopes were observed to have less plant density, less soil moisture, reduced diversity of species, and heavier weeds species (specifically dry species such as yellow-star thistle). The Blue Mountain Chapter of Pheasants Forever has encouraged landowners to diversify CRP stand with legumes.

Development of Agricultural Acres

The Walla Walla County Conservation District staff receive notices of permit applications including SEPA, Critical Area Permits, Shoreline, and Subdevelopment. Some may be related to infrastructure improvements and others to development of barren land. Conservation District staff review these applications as it pertains to agriculture and critical areas and respond if relevant to VSP efforts. Twenty applications were reviewed in the 2023-2025 biennium. Staff

provided comments with respect to VSP and critical areas on five of those applications. Staff have also attended information sessions and reviewed documents and contributed to the development on the *FEMA Risk MAP* (2022 to 2029) update process (FEMA, 2023), the *Walla Walla County Community Wildfire Protection Plan* update (Community Wildfire Protection Plan Steering Committee, 2023), and the *Multi-jurisdictional Hazard Mitigation Plan* update (Walla Walla County Emergency Management Department, 2024) process. A few contentious topics in these discussions include development on and adjacent to streams/waterways and converting agricultural land to residential lots. These issues will not be resolved through VSP but staff continue to support the protection of critical areas and viability of agriculture in these discussions. Conservation District staff also participated in various committees (Blue Mountain Trust Advisory Committee, WWCC Ag and Natural Resources Advisory Committee, City of Walla Walla Water and Waste Water Advisory Committee, Walla Walla Basin Advisory Committee, etc.) as it pertains to agriculture and critical area protection.

Commodity Buffer Program

In 2022, the Walla Walla County VSP Work Group and Walla Walla County Conservation District adopted a 'commodity buffer program.' The intent was to provide an alternative for edge of field, waterway, or right-of-way areas. Walla Walla County Public Works Dept. provided a map of known sedimentation problems along county roads. Outreach was directed to adjacent landowners. To date, no landowner has monopolized on this alternative.

Work Plan Status

After receiving feedback on the 5-Year Report, WWCCD and the VSP Work Group decided to adaptively manage Walla Walla County's VSP Work Plan to include more measurable and specific benchmarks and goals (RCW) 36.70A.720(1)(j). The VSP Work Group and WSCC approved several changes to the Work Plan in 2023-2024:

- Removal of one goal found ineffective in Walla Walla County for VSP.
- Changes to wording to provide clarity and specificity.
- Changes to benchmark thresholds to make goals more realistic with available resources.
- Changes from Protection Goal to Enhancement Goal, or vice versa.
- Six additional goals to expand critical area protection.

The Walla Walla County VSP Work Plan is undergoing additional adaptive management to be approved by the VSP Work Group and SCC prior to the 10-Year Report due by March 2026.

WWCCD staff and the Walla Walla County VSP Work Group took care to make informed decisions about changes to Walla Walla County's VSP Work Plan. Conservation District staff completed outreach and research to provide the Work Group with various options for adaptive management to address technical panel feedback.

Monitoring Plan 2024

WWCCD staff developed and submitted the Walla Walla County VSP Monitoring Guide in 2024 per the SCC-county contractual requirements. The monitoring plan was created based on the goals and benchmarks detailed in the Walla Walla County VSP Work Plan for protecting and

enhancing critical areas at the watershed scale, Table 5-1. The guide is a “living-document” that includes regularly updated and improved methods for how WWCCD staff carry out monitoring efforts. The Monitoring Guide helps standardize monitoring practices and ensures consistency when reporting critical area protection (Traynor, 2024d). The Walla Walla County VSP Monitoring Guide is available upon request to the WWCCD.

Landowner Outreach and Technical Assistance Highlights

Over the past 2 years, WWCCD has enhanced VSP outreach and Technical Assistance to boost landowner participation and promote the adoption of best stewardship practices. See Summary Tables 17, 19, and 20 for more details on Technical Assistance, Outreach, and Education provided to the Walla Walla County community in the 2023-2025 biennium.

WWCCD Annual Meeting

Each year, the Walla Walla County Conservation District hosts an annual meeting bringing together local producers and partners. The meeting is free and offers pesticide recertification credits for both Oregon and Washington, as well as technical assistance from partners and researchers. For the 2024 and 2025 Annual meetings, WWCCD reached approximately 80 producers in total, as per RCW 36.70A.720 (1)(d).

Dew Drop Drill

WWCCD purchased a small-scale direct seed drill/planter, called the Dew Drop Drill, in 2024 for landowners to rent for projects. The Dew Drop Drill has been rented five times and used to seed 12.5 acres conservation cover (NRCS BMP 327). WWCCD staff also used the Dew Drop to seed 1.75 acres of Upland Wildlife Habitat for a VSP cost-share project.

Walla Walla Watershed 2050

The Walla Walla Basin is a hydrologically, jurisdictionally, and biologically complex watershed. Because of this, a collaborative effort is needed for success. WWCCD has been actively involved in the efforts of the Walla Walla Waters 2050, a collaborative effort to ensure adequate water for people, irrigated agriculture, and instream flows for fish and wildlife. The 2050 plan evolved into the Walla Walla Basin Advisory Committee (WWBAC) overseen by the tri-sovereigns of the states of Washington and Oregon, along with the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). The Walla Walla Basin Advisory Committee includes over 40 stakeholders from local, state, and federal groups. The Walla Walla Basin Advisory Committee meets monthly with different working groups convening as needed. Many of these entities have been working diligently, but separately, for over 30 years to address water issues within the Walla Walla Basin. The 2050 plan “aims to identify and prioritize key strategies to balance and harmonize the basin’s threatened ecosystem health with the continued growth and prosperity of its human inhabitants” (Walla Walla Watershed Management Partnership, 2021).

Conserving and protecting waters across state lines is difficult. The Walla Walla Basin Advisory Committee and both state legislatures have made efforts for ongoing water protection. In 2023, the Department of Ecology was given authority to enroll water rights from Oregon into

Washington's Water Right Trust program. A temporary trust ran August 1, 2024 to September 30, 2024, to protect water supplies in the greater Walla Walla River Basin and enable fish to safely migrate upstream through Mill Creek to the upper reaches of the watershed. At a minimum, the temporary trust aimed to maintain a flow of eight cubic feet/second (cfs) of water in Mill Creek before it entered the Walla Walla River. While Ecology experienced some unforeseen challenges during this temporary trust, they plan to incorporate lessons learned to improve future implementation of the program.

To support WWBAC efforts within the Walla Walla Basin, Ecology's Office of Columbia River requested funding for capital projects in the Washington State legislative 2025-2027 biennium budget. Activities and projects located in Oregon that directly benefit Washington water quantity demand or the growth and survival of fish populations may be considered for this funding.

In March 2025, the WWBAC group finalized the *Tier 1 Strategy Implementation Plan and Funding Strategy*. The Implementation Plan "provides an implementation roadmap for the next five years (2025-2029) for high priority strategies out of the [Walla Walla Water 2050] effort" (AMP Insights, & Walla Walla Basin Watershed Strategy, 2025). *The Walla Walla River Bi-State Flow Study: 2025 Flow Study Update* was also finalized early 2025 (Jacobs Engineering Group Inc., & Aspect Consulting, 2025). In conjunction with the ongoing U.S. Geological Survey (USGS) ground water study (Washington Water Science Center, 2020), this study will help guide future implementation efforts.

Water & Wine and Pub Trivia Events

As part of the Walla Walla Watershed 2050 Strategy, WWCCD staff collaborated with staff from the Walla Walla Basin Watershed Council (WWBWC) to host educational community events about waters in the Walla Walla Basin. Between fall 2024 and spring 2025 staff hosted six Water & Wine events. Guest speakers from partner agencies shared on topics such as forest health and watershed resilience, aquifer storage and recovery, tribal practices, regenerative agriculture in vineyards, and more. In 2025, staff hosted four Pub Trivia with topics related to watershed functions and local watershed facts. In total, 230 people attended these events.

Farmer Mini Sessions

WWCCD staff hosted four Farmer mini sessions for producers to hear from USDA: NRCS, USDA: FSA, WSU Extension, the Walla Walla County Noxious Weed Control Board and WWCCD. Discussion included a wide range of topics related to conservation and agriculture including programs, funding opportunities, upcoming events, and evolving requirements. In total, 30 people attended these events.

Monitoring Efforts

Fish and Wildlife Habitat

Riparian Projects and Monitoring

The Walla Walla County VSP Work Group emphasized that riparian areas are a key focus of VSP in the county because they overlap with multiple critical areas. For the 2023-2025 biennium, WWCCD staff were able to implement riparian projects thanks to intensive outreach and technical assistance efforts. From in-house projects alone, WWCCD staff and partners planted approximately 27,500 stems on 165 acres adjacent to waterways.

Fish Screen Audit

Per the Walla Walla County VSP Work Plan, WWCCD conducted an audit of a sample set of known fish screens in Walla Walla County to determine functionality (Traynor 2024c). WWCCD reached out to 50 randomly-selected landowners in the Walla Walla Watershed in 2024 to inquire about the status of their fish screen for irrigation.

Outreach took time, as ownership of properties and contact information had changed since screens were installed. Of the 50 landowners contacted, WWCCD was able to obtain responses from 41 landowners, though five of those landowners were no longer using a fish screen or were unsure of the screen status. As such, the sample size was changed from 41 to 36 to reflect no fish screen irrigation for those landowners.



Figure 2: Surface diversion fish screen replaced with VSP cost-share funds

Table 2. Results for fish screen functionality audit performed by WWCCD in 2024 to predict what percent of fish screens in Walla Walla County remain functioning.

Fish Screen Functionality Audit									
	Total (N)	Sample Size (n)	Working	Replaced	Dead: Mech.	Dead: Other	Unknown	No longer pumping	Eff = (30/36) *100
Fish screens	383	41	21	9	2	4	4	1	83%

Effectiveness sample= $(n_{\text{working}} + n_{\text{replaced}})/n$

n = sample size (landowners we were able to contact with knowledge of screen)

Results showed that WWCCD met the goal of 60% functionality (pending SCC adaptive management approval), with 83% of landowners contacted reporting a functional fish screen. Additionally, there were six landowners that received technical and financial assistance to replace fish screens that were no longer compliant. During the 2023-2025 biennium, there were

an additional four fish screens replaced through VSP technical assistance and cost-share opportunities.

Irrigators in the Lower Snake Watershed divert flows from the Snake River. Screens used in this river are typically much larger and more complex. It would be difficult for staff to field-verify if they are working while irrigation occurs without risk to employee safety. To monitor fish screen functionality in the Lower Snake Watershed, WWCCD staff reached out to the Columbia Snake Rivers Irrigator Association (CSRIA) about irrigator compliance with WDFW standards in the Lower Snake Watershed (January 2025).

“All of the direct pumpers on the Lower Snake River, Upper McNary pools operate on USACE lease land, most of which have been renewed for another 40 years. The Corps requires, as a lease provision, that all irrigation/municipal intakes comply with screen requirements (about 1/32 inch) and approved intake velocities, as reviewed by NOAA Fisheries and the WDFW. There are no exceptions. Modification to the pump stations require Corps pre-approval.”

-Darryll Olsen, Ph.D., Board Representative CSRIA
(D. Olsen, personal communication, January 25, 2025)

Fish Passage Barrier Assessments

Washington Department of Fish and Wildlife (WDFW) has a Fish Passage Barrier database for the state of Washington. The Snake River Salmon Recovery Board (SRSRB), processed that data in 2023 to prioritize barriers (SRSRB, 2023). Many mapped fish passage barriers were listed as “unknown” but lack data in the prioritization, including an assessment, to determine if they are actually barriers. The Walla Walla County VSP Work Group added a goal for fish passage barriers to the Walla Walla VSP Work Plan (RCW) 36.70A.720 (1)(a) in 2023 to address this data gap.



Figure 3. Culvert assessed by WWCCD staff.

WWCCD staff used WDFW’s barrier assessment methods to conduct a Level A assessment of 21 “unknown” barriers on the SRSRB Barrier Prioritization map that lack data. Information and methods for a Level A assessment can be found on the WDFW Fish Passage Barrier Prioritization webpage (WDFW, 2025) in *the Fish Passage Inventory, Assessment, and Prioritization Manual* (Barrett & Zweifel, 2019). After the assessments, WWCCD staff processed the data and submitted them to WDFW for barrier status determination. The data were uploaded to the WDFW Fish Passage Diversion, Screening, and Inventory database and can be explored on the public WDFW Fish Passage Map.

WWCCD staff performed assessments in Spring 2024 and 2025. In total, 21 culverts were assessed in WRIA 32 within Walla Walla County. Culverts were determined to be barriers due to slope (2), water surface drop (2), and debris (1). These assessments resulted in the determination of 5 barriers and 2

non-barriers. Sites that remain “unknown” require a Level B assessment. While 14 sites remain “unknown”, staff may perform Level B assessments as funding and time allows (Cooper, 2025d).

Table 3. WDFW protocol Level A assessments for Fish Passage Barrier results from 2024-2025, performed by WWCCD.

Level A Fish Passage Barrier Assessment Results				
Year	Total Assessed	Barriers	Non-Barriers	Barrier Status Unknown
2024	13	4	0	9
2025	8	1	2	5
Total	21	5	2	14

Improving Fish Passage

Partners, such as the Tri-State Steelheaders (TSS) are working to improve fish passage in the Walla Walla Watershed by removing barriers and installing fishway chutes/pools. In 2024-2025, TSS removed two barriers and installed 47 fishway chutes/pools through three major projects on Mill Creek (D. Talkington, personal communication, March 4, 2025).

Ferruginous Hawk Nest Occupancy Rate

In 2023 the Walla Walla County VSP Work Group approved the addition of a goal for monitoring ferruginous hawks, a WDFW state “endangered” migratory species. They are also identified as a ‘Species of Greatest Conservation Need’ and a Priority Species. Walla Walla County is an essential part of the ferruginous hawk’s western breeding range (Watson & Azerrad, 2024a). To protect breeding pairs and their nests, locations of known nests are kept confidential.

Each year (2023-2025), WWCCD staff reached out to WDFW staff and requested an update on ferruginous hawk nest occupancy in Walla Walla County (RCW) 36.70A.715 (1)(a)(b). Staff then calculated the occupancy rate based on occupied nests from the total number of nests surveyed that year. There are many unknown variables around ferruginous hawk nest occupancy, and it is unknown the extent agricultural activities may impact nest occupancy.

Ferruginous hawk nest occupancy rate in Walla Walla County was above 51% in both 2023 and 2024 (Cooper, 2025b), as shown in Figure 4. There are 25 proposed locations for new nest installations (M. Vekasy, personal communication, February 24, 2025). In the future, this goal may need to be adaptively managed if the occupied nest rate decreases due to the influx of nesting sites. Adaptive management may also need to be considered if it is determined conditions/influences other than agricultural activities result in lower ferruginous hawk nest occupancy rates.

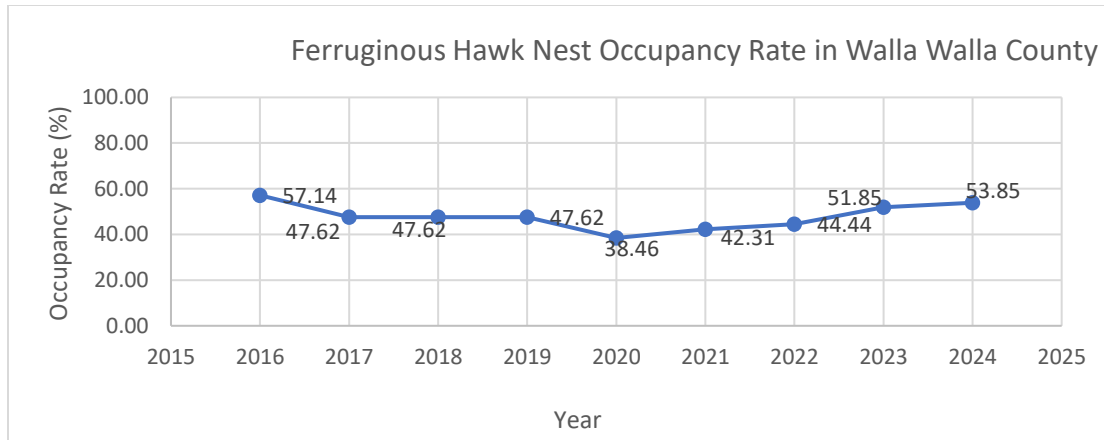


Figure 4. Ferruginous hawk nest occupancy rate in Walla Walla County 2016-2024. Occupancy rate (%) calculated as: $(\text{Occupied} / \text{Total Nests Surveyed}) * 100$. Data provided by WDFW, VSP report written by WWCCD (Cooper, 2025b)

Conservation Acres in Mapped Ferruginous Hawk Zones

The Washington Department of Fish and Wildlife (WDFW) deems conservation acreage, including acres enrolled in the Farm Service Agency (FSA) Conservation Reserve Program (CRP), crucial for ferruginous hawk survival. Walla Walla County has many acres of agricultural land enrolled in conservation programs. The Walla Walla County Conservation District (WWCCD) cannot influence these contracts. Still, it can track the changes in conservation acreage and adjust its own outreach and programs based on information gathered. As stated in Walla Walla County VSP Work Plan Section 1.5, VSP participants with conservation contracts (e.g., Conservation Reserve Enhancement Program [CREP], Conservation Reserve Program [CRP], Conservation Stewardship Program [CSP], etc.) are not required by VSP to continue their voluntary measures after contract expiration ([RCW 36.70A.760](#)). Farmers and ranchers participating in VSP will be encouraged to continue protecting those areas through various BMPs (WWCCD & Anderson Perry & Associates Inc., 2017). The Walla Walla Voluntary Stewardship Program (VSP) Work Plan includes a goal regarding conservation acres in mapped Ferruginous Hawk zones, based on the Priority Species Habitat (PHS) maps produced by WDFW in 2017.

In 2025, WWCCD staff used WSDA Agricultural Land Use Data from 2011 (WSDA, 2011) and 2024 (Demory, 2025) to determine known conservation acres in WDFW mapped Ferruginous Hawk habitat. PHS data for ferruginous hawk habitat was first requested from WDFW in 2023. At the time, the most recent spatial data available was from 2017. To protect ferruginous hawks, the spatial data shared from 2017 was considered sensitive information that should not be made public. In 2025, WWCCD staff requested the most recent ferruginous hawk PHS habitat data. WDFW published a new and publicly available ferruginous hawk breeding habitat layer in 2024 (Watson & Azerrad, 2024b). These data span a much larger geographic area of Walla Walla County than the data provided in 2017. The 2024 ferruginous hawk breeding habitat is identified in four different zones associated with distance from hawk nests. Closest to nests and the areas where hawks are most vulnerable to disturbance, are the Core Habitat and the Core Habitat Disturbance Buffer. The Home Range is also an important zone as it provides

many of the species' habitat needs such as prey for foraging. While still considered important ferruginous hawk habitat zones, the two outer layers are less of a priority for ferruginous hawk habitat management.

For this assessment, WWCCD staff performed two analyses of ferruginous hawk habitat in CRP acres (Cooper, 2025f). The first analysis compares WSDA CRP data from 2011 and 2024 to the WDFW ferruginous hawk PHS maps published in 2017, to compare conservation acres in mapped FEHA zones to the baseline determined in 2023. The second analysis compares WSDA CRP data from 2011 and 2024 to the WDFW PHS data from 2024, to get a more accurate look at conservation acres in ferruginous hawk zones in the Lower Snake Watershed (WRIA 33) and the Walla Walla Watershed (WRIA 32) in Walla Walla County. These data were processed in ArcGIS; detailed methods can be found on the WWCCD internal server.

Using the ferruginous hawk habitat mapped by WDFW in 2017 WWCCD staff found that in 2011, there was about 40,793 acres of CRP in Walla Walla County. In 2024 this decreased by about 4,067 acres, for a total of 36,726 conservation acres in ferruginous hawk habitat. Most of this change is due to fields being converted back into agriculture since 2011.

Table 4. Conservation Reserve Program (CRP) conservation acres in ferruginous hawk territory mapped in 2017 Priority Habitat Species (PHS) maps published by WDFW. Assessment performed by WWCCD staff.

CRP Acres in 2017 Mapped Ferruginous Hawk Habitat			
	WRIA 32	WRIA 33	Walla Walla County
2011	40077.22	715.81	40793.03
2024	36352.28	373.81	36726.09
Change	-3724.94	-342.00	-4066.94

Using the ferruginous hawk habitat mapped by WDFW in 2024, WWCCD staff found that in 2011 in Walla Walla County there was about 106,277 acres of CRP in ferruginous hawk breeding zones and about 31,994 of those acres fall within the two inner zones – the Core Area and the Core Area Disturbance Buffer. In 2024, there was almost a 2,000-acre (or <2%) loss in conservation acres in ferruginous hawk breeding habitat in Walla Walla County, with a total of 104,277 acres. There was 30,884 conservation acres in the two inner zones, and 37,884 conservation acres within the ferruginous hawk Home Range. As stated above, landowners are not required to continue CRP contracts after expiration. WDFW is taking steps to protecting/enhancing ferruginous hawk territories, regardless of CRP contracts. The WDFW is working to improve ferruginous hawk habitat by installing Artificial Nest Structures. There are currently 25 new proposed locations. WDFW has also created a list of mitigation measures that can be taken to avoid or minimize disturbance in the most critical breeding zones. These can be found in the document, *Management Recommendations for Washington's Priority Species: Ferruginous Hawk* (Watson & Azerrad. 2024a). Tables 5-7 and Figure 5, below, include changes in CRP acres in 2024 mapped ferruginous hawk zones in watersheds in Walla Walla County.

Table 5. Conservation Reserve Program (CRP) conservation acres in ferruginous hawk breeding territory mapped in 2024 publicly available data provided by WDFW.

CRP Acres in 2024 Mapped ferruginous hawk Habitat			
Zone	2011	2024	Change
Core Area	27634.38	26630.09	-1004.30
Core Area Disturbance Buffer	4360.10	4254.29	-105.81
Home Range	36492.61	37883.56	1390.95
Outer Priority Management Zone	37789.91	35509.43	-2280.48
Total	106277.01	104277.37	-1999.64

Table 6. Acres of Ferruginous Hawk breeding territory mapped in 2024 in conservation acres or the Conservation Reserve Program (CRP) in WRIA 33, Walla Walla County

Ferruginous Hawk Territory in CRP- WRIA 33			
Zone	2011	2024	Change
Core Area	4440.58	4263.54	-177.04
Core Area Disturbance Buffer	4.06	0.00	-4.06
Home Range	22500.37	23034.06	533.68
Outer Priority Management Zone	25313.81	26031.69	717.89
Total	52258.82	53329.29	1070.47

Table 7. Acres of Ferruginous Hawk breeding territory mapped in 2024 in conservation acres or the Conservation Reserve Program (CRP) in WRIA 32, Walla Walla County.

Ferruginous Hawk Territory in CRP - WRIA 32			
Zone	2011	2024	Change
Core Area	23193.81	22366.55	-827.25
Core Area Disturbance Buffer	4356.04	4254.29	-101.75
Home Range	13992.24	14849.50	857.26
Outer Priority Management Zone	12476.10	9477.73	-2998.37
Total	54018.18	50948.08	-3070.11

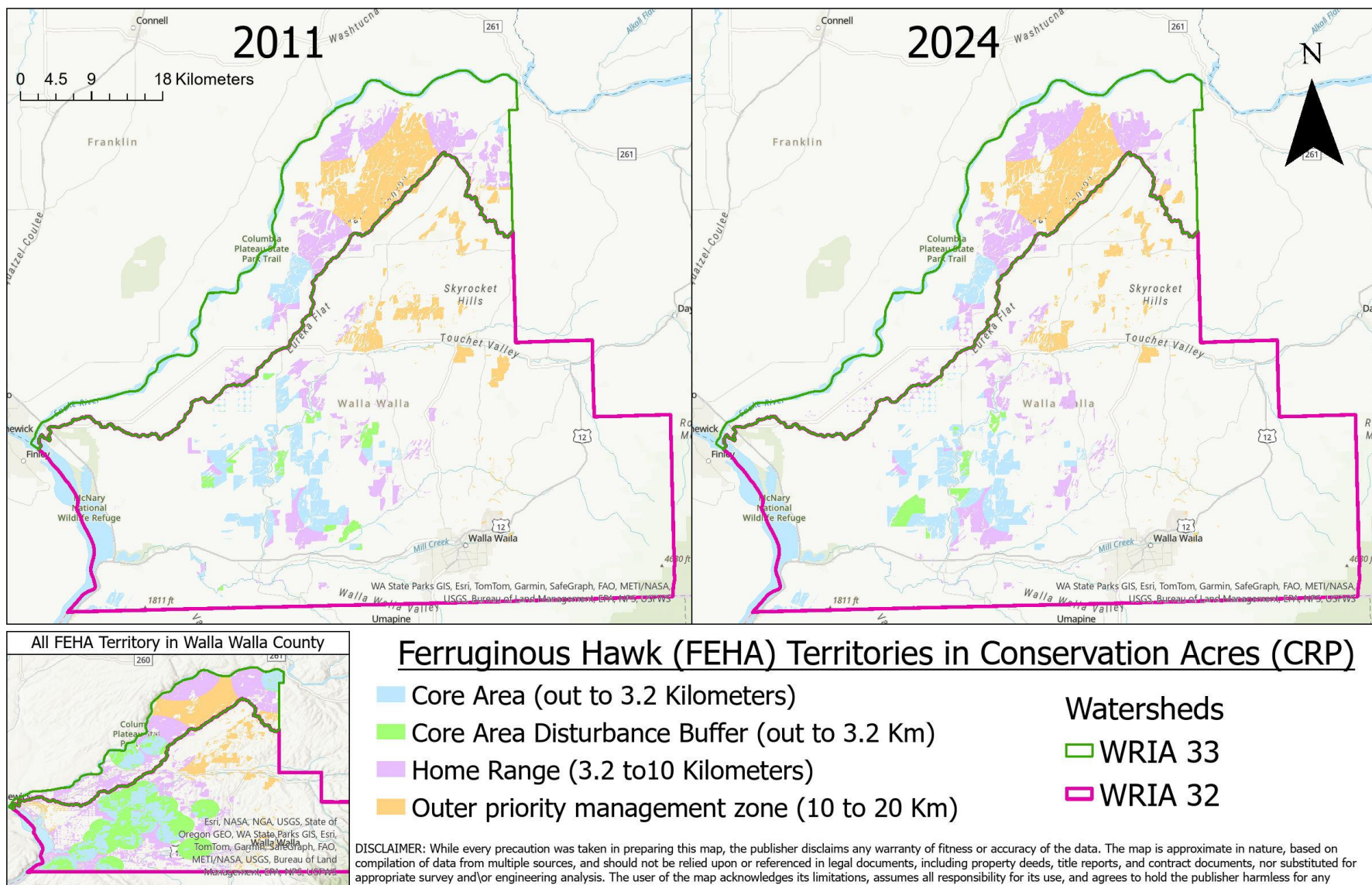


Figure 5. Ferruginous Hawk Territories in Conservation Acres. CRP acres derived from WSDA Agricultural Land Use Data 2011 and 2024. Ferruginous Hawk data derived from WDFW Ferruginous Hawk Breeding Habitat maps published in 2024. Figure and assessment completed by WWCCD staff.

Agriculture Activity in Mapped Mule Deer Habitat

According to the Walla Walla County VSP Work Plan, WWCCD conducted outreach to audit over 5,000 acres (by parcel) of land use related to agriculture in the mapped mule deer habitat, as per the WDFW Priority Habitat and Species (PHS) 2023 maps (WDFW, 2023). Walla Walla County and partner agencies lack information about agricultural activities in the foothills of the Blue Mountains. The foothills are mapped as critical habitat for mule deer according to the WDFW PHS 2023 maps. Mule Deer are one of several ungulates in the Walla Walla County that use the Blue Mountains for habitat and have become a WDFW focus for conservation in Walla Walla County in recent years. Other ungulates include elk and white tail deer. The foothills in Walla Walla are entirely in the Walla Walla Watershed (WRIA 32).

Between 2024 and 2025, staff cataloged land use and agriculture activity for 32 parcels covering approximately 6,119 acres in the foothills of Walla Walla County. Nearly half of the parcels surveyed were timber (2,961 acres) and another large portion was cataloged as pasture for grazing (2,007 acres). One parcel surveyed was cataloged as CRP/Conservation land use and was 165 acres (Traynor & Cooper, 2025).

Table 8. WDFW 2023 Priority Habitat Species (PHS) Mule Deer habitat mapped in various land use types. Results provided by 2023 Mule Deer habitat ag activity survey (Walla Walla County Foothills).

2023 Mule Deer Habitat Ag Activity Survey Results (Walla Walla County Foothills)	
Land Use	Total Acres
Timber	2961
None	763
Conservation/CRP	165
Cereal Grains	223
Grazing (Pasture)	2007
Total Acres Cataloged	6119

Staff reached out to WSDA staff for newly documented areas included in the 2023 WSDA Land Use Data, and received information on 146.7 acres. In total, staff cataloged agricultural activity on 6,265.7 acres of the 35,291 “unknown” acres in the foothills of Walla Walla County identified in December 2023. This satisfies the Walla Walla County VSP goal to catalog at least 5,000 acres of mapped mule deer habitat in the foothills every 2 years. Still, there remains 29,034.3 acres of unknown land use in the mapped PHS Mule Deer habitat. Cataloging land use in this area will continue to provide WWCCD and partner agencies valuable information for stewarding Mule Deer habitat in the county.

Conservation Acres in Mapped Mule Deer Habitat

The Walla Walla County VSP Work Group determined tracking trends of conservation acres within mapped Mule Deer Habitat would help staff adjust outreach, develop projects, and

monitor benefits to Mule Deer in the county. The Walla Walla VSP Work Plan includes an enhancement goal that known conservation acres in mapped Mule Deer Habitat will not fall below 800 acres. This monitoring effort utilizes WSDA Agricultural Land Use Data which contains information on crop type, including conservation acres. As stated in the above monitoring effort, there is limited data on agricultural activity and conservation acres in the foothills of the Blue Mountains where most of the Mule Deer habitat in Walla Walla County is mapped by WDFW PHS (WDFW, 2023).

In 2025, WWCCD staff used WSDA Agricultural Land Use Data from 2011 (WSDA, 2011) and 2024 (Demory, 2025) to identify known conservation acres within WDFW PHS mapped Mule Deer Habitat, last updated in 2023. In geographic areas common to both WSDA datasets, there were about 1,259 acres of conservation acres in mapped Mule Deer habitat in Walla Walla County in 2011. In 2024, this increased by about 210 acres, bringing the total to 1,469 conservation acres within mapped Mule Deer habitat (Cooper, 2025e).

Table 9. WDFW 2023 Priority Habitat Species (PHS) Mule Deer habitat mapped in conservation acres in Walla Walla County. Assessment performed by WWCCD staff.

Mule Deer Habitat in Conservation Acres			
WRIA	2011	2024	Change
32	560.17	709.78	149.61
33	699.18	759.33	60.15
Total	1259.35	1469.11	209.76

Challenges and Outreach

Following the first 5-year Status Report, technical panel members gave feedback for improving upland habitat and riparian monitoring efforts. Technical panel members wanted to see more monitoring for upland critical areas. Because most of the upland habitat in Walla Walla County is composed of CRP acreage, WWCCD staff worked with partners to find ways to incorporate CRP monitoring while adhering to USDA confidentiality laws. Still, there remain challenges with monitoring upland habitat and CRP:

- Data privacy concerns and more details wanted from the Farm Service Agency.
- Assertions by VSP review members and NRCS that CRP status review information could not be statistically significant/beneficial for our purposes.

Technical panel members offered two pieces of feedback for monitoring riparian areas: to better distinguish agricultural and non-agricultural impacts, and to identify a specific function to track besides acreage. Identifying more specific “functions and values” through riparian monitoring presents challenges to WWCCD, such as:

- Walla Walla County has about 470 miles of waterways, creating a massive riparian footprint.

- Riparian projects take time to establish and create a monitoring signal.
- Many waterways in the county have CREP contracts. Walla Walla County holds approximately 25 percent of CREP acres in the state of Washington. The Farm Service Agency is the contracting authority for that program. Walla Walla County VSP continues to explore CREP monitoring options that comply with USDA confidentiality laws.

Working in response to technical panel members' feedback, WWCCD staff sought technical assistance and guidance for improving riparian monitoring, fish passage barrier monitoring, and the addition of several upland habitat monitoring efforts (RCW) 36.70A.720 (1)(b)(k).

Riparian:

- Staff attended the 2025 Eastern Washington Riparian Symposium and Ecology's presentation on EPA's Stream Function Assessment Method.
- WWCCD staff listened to WDFW's session on riparian monitoring applications.
- Tri-State Steelheaders provided information on their ongoing riparian and stream restoration projects.
- NRCS staff provided WWCCD staff with current data on riparian BMPs implemented in Walla Walla County.

Fish Passage Barrier:

- CTUIR and SRSRB provided information on the prioritization of potential fish passage barriers that had "unknown" barrier status.
- USFWS provided information on the prioritization of barriers specific to Bull Trout.
- WWCCD staff coordinated a fish passage barrier two-day training put on by WDFW for WWCCD staff and interested partners (45 attendees). WDFW also assisted with data submission and determining barrier status.
- SCC staff helped WWCCD staff purchase necessary monitoring equipment.

Upland Habitat – Ferruginous Hawks (FEHA):

- WDFW provided general information such as ferruginous hawk life history, predatory tendencies, agricultural impact, monitoring efforts, etc.
 - Professors and students from Whitman College and WSU expressed interest in aiding WWCCD and WDFW in implementing ferruginous hawk monitoring efforts.
 - One Whitman College student intern completed their senior thesis on ferruginous hawk association to pocket gophers and vegetation in Walla Walla County in conjunction with WDFW.

Upland Habitat – Mule Deer:

- WDFW staff provided information on mule deer habitat use, potential monitoring efforts, and provided Priority Habitat Species (PHS) data.
- WSDA staff provided updated information on new parcels included in the 2023 WSDA Agriculture Land Use data.

Upland Habitat – General:

- WDFW staff met with WWCCD to discuss ways they could collaborate on projects and monitoring. WDFW detailed the methods they use for tracking the health of priority species and types of projects they undertake, and provided technical assistance in

identifying upland habitat.

- NRCS and FSA provided feedback on CRP status reviews and monitoring within VSP.

Wetlands

Wetlands in Walla Walla County were designated using National Wetland Inventory Data (NWI) and were used to create the Critical Area Ordinance map for Walla Walla County (Walla Walla Community Development Department, 2019). Most mapped Wetlands are riverine wetlands, mapped in or adjacent to waterways in the county. Walla Walla County's VSP Work Plan has three goals for wetland protection: protecting acreage of known wetlands, furthering map accuracy through a wetland inventory, and restoring wetlands.



Figure 6. Area visited for the Wetland Accuracy Audit determined to likely be a wetland.

Wetland Accuracy Audit

Walla Walla Watershed Photo Point Survey:

Tracking the protection and enhancement of wetlands is challenging in Walla Walla County because wetlands are small and were initially mapped at a large scale. Part of any meaningful critical area monitoring effort for the county is knowing where critical areas are (RCW) 36.70A.720 (1)(h)(i). To determine the accuracy of Walla Walla County Wetland maps and identify next steps, WWCCD staff completed field checks with photo point monitoring of wetland areas to assess whether evidence of wetlands existed or not (Traynor, 2024a).

The Walla Walla County VSP wetland map comprises 1,136 wetland shapes. Staff made a goal to randomly select and visit about 100 of those. WWCCD undertook intensive outreach, reaching 27 different landowners to inform them of the effort. Of those, staff received permission from 16 landowners to survey 142 mapped wetland shapes. Field visits and photo points were conducted between March 18th and April 16th 2024. Photos were dated, geolocated, and tagged with compass coordinates. Renee Hadley, WWCCD's District Manager who has experience and training in wetland delineation, and district staff reviewed the photos and their location to determine likelihood of wetland.

After sorting through the "mixed" wetland category, approximately 30 percent of the wetland shapes visited could be confirmed as likely wetlands. Even if one assumes the best-case scenario—that all wetland shapes classified as "unknown" are wetlands— it would still mean only about 38 percent of the sample set are wetlands.

Table 10. Results of Wetland Accuracy Audit in the Walla Walla Watershed (WRIA 32) in Walla Walla County. Wetland shapes mapped by the National Wetland Inventory were assessed for likeliness of being a wetland by WWCCD staff in 2024. Staff used a mix of aerial imagery, in person site visits, and photo evidence for determination.

Wetland Accuracy Audit Results 2024 : Walla Walla Watershed Photo-Point Survey					
Sample Goal	Sample Size	Likely Wetland	Unlikely Wetland	Unknown	Accuracy
100	142	43	87	12	30.3%

Notes: Accuracy was calculated as: (Likely Wetlands/Sample Size)*100

There were several reasons some areas were determined to not be wetlands, including proximity to waterways, vegetation, and topography. Many of the mapped wetland areas that were determined unlikely wetlands were gravel bars adjacent to or in the main channel of waterways. There are some small wetland areas along stretches of rivers in Walla Walla County, but many of the wetland shapes mapped in river corridors include side channels or the main channel itself as wetlands. The acreage of mapped areas visited further supports the small size of wetlands in Walla Walla County. Of the 142 wetland shapes visited, 65 were smaller than 1 acre, and an additional 34 shapes were under 2 acres. These results support anecdotal evidence that Walla Walla County Wetlands are poorly mapped, small, and sparse. Larger wetlands adjacent to mis mapped wetland shapes would have been easily spotted and captured in some of the photo point monitoring conducted for this audit.

Aerial Imagery Survey (Lower Snake Watershed):

Monitoring wetland accuracy in the Lower Snake Watershed and the southwest corner of the Walla Walla Watershed of Walla Walla County is especially difficult. In the past, landowners in this area have not cooperated with WWCCD monitoring efforts. This is partially because many of the producers in the region are corporately owned. To avoid potential conflicts, WWCCD staff chose a different approach for monitoring wetland accuracy in this area.

Wetland shapes mapped in this area of Walla Walla County were audited via an aerial survey only (Cooper, 2025a). In addition to these, four wetland shapes along the Columbia River in the Walla Walla Watershed were included in the aerial survey for the same reasons. In total, WWCCD staff surveyed 45 wetland shapes using ArcGIS Pro and NAIP imagery. Again, Renee Hadley (WWCCD) reviewed the wetland shapes to determine the likelihood of wetland presence. In the case a shape seemed likely to be a wetland, it was categorized as an “unknown,” because field verification would be necessary to determine it was “likely.”

Of the 45 wetland shapes surveyed by aerial imagery, only one appeared likely to have select wetland characteristics (considered “unknown” without field verification). There were 44 shapes considered unlikely to be a wetland. In the best case, about 2% of this sample set were likely to be accurate.

Table 11. Results of Wetland Accuracy Audit in the Lower Snake Watershed (WRIA 33), and some portions of the Southwest Walla Walla Watershed (WRIA 33), in Walla Walla County. Wetland shapes mapped by the National Wetland Inventory were assessed for likeliness of being a wetland by WWCCD staff in 2025. Staff used aerial imagery to determine likeliness, as in person site visits were unrealistic in this region.

Wetland Accuracy Audit Results 2025: Aerial Imagery Survey			
Sample Size	Unlikely Wetland	Unknown	Accuracy
45	44	1	2%

Notes: Assuming the unknown wetlands were “likely,” accuracy was calculated as: (Likely Wetlands/Sample Size)*100

Combining this sample set with the 2024 wetland audit (142 shapes) would change the calculated accuracy. If the “unknown” wetland from the aerial survey was considered a likely a wetland and combined with only the “likely” wetlands from 2024, the estimated accuracy of the wetlands mapped in Walla Walla County by the NWI would be about 23.5% for the combined sample set. If we were to assume “unknown” wetland shapes from 2024-2025 were indeed “likely”, the estimated accuracy would be about 29.9%.

Mapped wetlands in the Lower Snake Watershed and southwest Walla Walla Watershed were determined not to be wetlands because they do not exhibit wetland characteristics and exist as part of artificial structures created for agricultural production.

This audit reveals that mapped wetland shapes in Walla Walla County rarely correspond to the likely presence of wetlands. WWCCD will continue to working with partner organizations and the county to address the current limitations of wetland mapping at large scales.

Challenges and Outreach

During the 5-Year review, technical panel members noted that it would be beneficial to explore monitoring functions and values of wetlands beyond acreage. Unfortunately, Walla Walla County VSP continues to have challenges when it comes to monitoring these wetlands:

- Walla Walla County VSP Wetland Maps are not accurate. The subset of mapped wetland areas visited for the Wetland Accuracy Audit, Walla Walla Watershed Photo Point Monitoring (Traynor 2024a), yielded an accuracy of only 30-38% for the presence of select wetland characteristics.
- Wetlands in Walla Walla County are minimal in size. Of the 142 mapped wetland areas visited, 65 were smaller than one acre, and an additional 34 shapes were under two acres.
- Several landowners contacted for the Wetland Accuracy Audit were wary of providing access for photo points due to implied regulations and impacts on agriculture.

Most of the wetland monitoring outreach done was through the Wetland Accuracy Audit efforts. However, in response to technical panel members’ feedback, WWCCD staff sought technical assistance and advice for improving wetland monitoring efforts (RCW) 36.70A.720 (1)(b)(k).

- WWCCD contacted staff with USFWS to inform them of wetland audit efforts with hopes they may be able to prioritize the county for wetland map updates.
- SCC was contacted for advice for wetland monitoring given the inaccuracy of available resources.
- Walla Walla County staff attended a 2025 WWCCD Board Group meeting and was interested in relaying WWCCD challenges with the current county wetland map to other county staff.
- WWCCD staff also attended the 2023 VSP Monitoring Symposium wetland monitoring session hosted by the SCC and other technical panel members.

Frequently Flooded Areas

Frequently Flooded Areas are those areas within the FEMA mapped 100-year floodplain. Because Walla Walla County has about 470 miles of waterways, frequently flooded areas constitute a large acreage in Walla Walla County. These areas often overlap with other critical areas, like Fish and Wildlife Habitat and Liquefaction. The original Walla Walla County VSP Work Plan includes education and outreach goals for Frequently Flooded Areas, as well as a goal to increase use of flood planning tools regarding development. Many partners are working on stream restoration projects that enhance frequently flooded areas. See Stream Restoration section on page 6. One example of a floodplain restoration project is summarized below.

Walúula Floodplain Restoration

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the U.S. Fish and Wildlife Service (USFWS) are working together on a large-scale habitat restoration and enhancement project spanning about 1,200 acres within the McNary National Wildlife Refuge – Wallula Unit. The Walla Walla River, being the last unconfined and relatively undeveloped river delta in the Middle Columbia River region, offers a unique and significant opportunity for conservation. Both the CTUIR and USFWS share a commitment to restoring and improving floodplain, wetland, and instream habitats to support fish and wildlife populations (Green & Kahl, 2023). Since July 2023, Project Leader Steve Kahl (USFWS) has delivered 29 presentations on the project, reaching about 290 people, discussing not only the details of this effort but also the functions our historical floodplains provide and why maintaining them is vital (S. Kahl, personal communication, March 19, 2025).

Challenges and Outreach

VSP reviewers commented on the Walla Walla County 5-Year VSP report that education and outreach goals do not correlate with protection. The Walla Walla County VSP continues to face challenges for monitoring Frequently Flooded Areas:

- The intersection of agricultural activities overlapping frequently flooded areas is minimal and is being addressed through various BMPs.
- Monitoring water storage or recharge is extremely difficult due to the complex network of waterways in the county. The USGS is currently conducting a multi-year groundwater study, which involves interactions between surface and subsurface water (Washington Water Science Center, 2020).

- Walla Walla County lacks comparable LiDAR data between years to use for baselines, goals, and benchmarks in the VSP Work Plan.

WWCCD conducted monitoring, outreach, and research to gain deeper understanding and address the concerns of VSP technical panel members. WWCCD staff sought advice and technical assistance from various partners and other conservation districts (RCW) 36.70A.720 (1)(b)(k).

Critical Aquifer Recharge Areas

Walla Walla County has a shallow gravel aquifer that spans portions of both Washington and Oregon. The shallow aquifer is hydrologically connected to surface streams and rivers. To track Critical Aquifer Recharge Area (CARA) protection, the Walla Walla County VSP Work Plan uses flow meter compliance, maintenance of existing aquifer recharge projects, and water quality BMP outreach metrics. In addition to these metrics, see Table 14 for metrics on water rights purchased and leased by the Washington Water Trust.

Flow Meter Audit

WWCCD staff conducted an audit of a sample set of known flow meters in the Walla Walla Watershed to assess their functionality (Traynor, 2024b). WWCCD reached out to 50 randomly selected landowners in 2024 about the status of their flow meters. Flow meters measure water withdrawals that can impact Critical Aquifer Recharge Areas and stream flow volumes that impact Fish and Wildlife Habitat.

Of the original sample (50), WWCCD staff were able to get responses from landowners for 31 flow meters. This year, the most common complaint by landowners on the effectiveness of flow meters was mechanical failure due to corrosive water and sediment.

Table 12. Results for flow meter functionality audit performed by WWCCD in 2024 to predict what percent of flow meters in Walla Walla County remain functioning.

Flow Meter Functionality Audit 2024									
	Total (N)	Sample Size (n)	Working	Replaced	Dead: Mech.	Dead: Other	Unknown	No longer pumping	Eff = (22/27) *100
Flow Meters	545	31	14	8	2	3	3	1	81%

Notes: Effectiveness sample= (n working +n replaced)/n. N = sample size (landowners we were able to contact with knowledge of meter).

Although effectiveness reached around 81%, it is important to note that there four landowners who were no longer using a flow meter or were unsure of the meter's status. As such, the sample size was adjusted from 31 to 27 to reflect no flow meter use for those landowners. Through this effort, there were four landowners that received technical and financial assistance to replace flow meters that were no longer operable. During the 2023-2025 biennium, an additional seven flow meters were replaced through VSP technical assistance and cost-share opportunities.

Irrigators in the Lower Snake Watershed divert flows from the Snake River. Along with screens, meters used in this river are generally larger and more complex. It would be difficult for staff to verify in the field if they are functioning properly during irrigation without risking employee safety. To monitor flow meter functionality in the Lower Snake Watershed, WWCCD staff contacted the Columbia Snake Rivers Irrigator Association (CSRIA) about irrigator compliance with WDFW standards in the Lower Snake Watershed.

“All of the direct pumpers on the Lower Snake River, Upper McNary pools operate on USACE lease land, most of which have been renewed for another 40 years. The Corps requires, as a lease provision, that all irrigation/municipal intakes comply with screen requirements (about 1/32 inch) and approved intake velocities, as reviewed by NOAA Fisheries and the WDFW. There are no exceptions. Modification to the pump stations require Corps pre-approval.

The systems are closed pipelines (except one hobby farm project operated by the USBR), where the (machine) irrigation application efficiencies are at 90% to 95%, per agreement with CSRIA and Ecology (see Conservation O&M at the CSRIA.org web site). This means that any measurable return flows should be nonexistent, and the water use is consumptive, capable of water right change/transfers under RCW 90.03.380.”

-Darryll Olsen, Ph.D., Board Representative CSRIA
(D. Olsen, personal communication, January 25, 2025)

WSDA Ground Water Well Testing

The Walla Walla County VSP Work Plan includes a goal to educate community members of pollutant levels and promote nutrient management BMPs. In this biennium, WWCCD partnered with WSDA to test groundwater in the Walla Walla Basin as part of the Regional Pesticide and Nutrient Monitoring Program through WSDA’s Natural Resources and Agricultural Sciences (NRAS) section (NRAS, 2025). This is complimentary to the Oregon based Pesticide Stewardship Program.

This is a free, voluntary, non-regulatory, researched-based program aiming to assess the presence and concentration of pesticides in local aquifers. Results from this program will help fill in gaps in pesticide data and inform residents on the quality of their drinking water. The results will also help WWCCD track and monitor the impact of agricultural practices on Critical Aquifer Recharge Areas.



Figure 6. WSDA staff sampling a well in the Walla Walla Basin.

In the spring of 2025, WSDA sampled 38 wells in the Walla Walla basin for pesticides, nutrients, common ions, and metals. In these samples, three pesticides were detected at trace levels, all below 1% of EPA established drinking water criteria. Less than 15% of wells sampled had detectible levels of nitrate above the EPA maximum contaminant level of 10mg/L (J. Hancock, personal communication, June 26, 2025). The WSDA will resume sampling and analysis in 2026. All study participants receive free information about their well water results.

Challenges and Outreach

During the 5-Year Report, technical panel members asserted that surface flow meter replacements and compliance did not necessarily mean groundwater aquifer protection was being achieved. They also stated that outreach metrics do not directly tie to an improvement in water quality. With this feedback in mind, Walla Walla County's unique shallow aquifer poses challenges when it comes to monitoring.

- Until 2022, Ecology requirements for groundwater monitoring for aquifer recharge projects were prohibitively expensive, reducing use of recharge projects through the county.
- There is not much data on surface and subsurface water interactions in Walla Walla County. USGS is currently studying the Walla Walla shallow aquifer to help answer questions (Washington Water Science Center, 2020).
- The aquifer spans the state border, meaning both Washington and Oregon agricultural practices and water use have direct impacts on the aquifer portions in Washington. As stated in the 2017 Walla Walla VSP Work Plan, activities from decades ago may still have current impacts through migration in the soil.

In response to technical panel members' feedback, WWCCD staff sought technical assistance and advice for improving monitoring efforts for Critical Aquifer Recharge Areas (RCW) 36.70A.720 (1)(b)(k).

- WSDA contacts provided background and information on their surface water testing in Walla Walla County, and shared this opportunity with local landowners at the 2025 WWCCD annual meeting.
- WWCCD staff met with ECY about possible opportunities to monitor toxics in the Columbia River Basin.
- The Washington Water Trust provided information on education/outreach efforts pertaining to water use efficiency, as well as information and metrics on water rights purchased or leased to the trust (see Table 14).

Geologically Hazardous Areas

Soil Erosion from Wind and Water

Wind and Water erosion areas were classified based on soil characteristics, erosion potential, and areas with slopes greater than 30 percent. Wind and Water Soil Erosion Areas were removed from Walla Walla County's Comprehensive Plan in 2018 because there is no regulatory backstop. These areas remain included in the Walla Walla County VSP Work Plan, as

soil erosion impacts agricultural viability and critical area function. Wind surges coming from the Columbia River Gorge flows through the narrow Wallula Gap to the northeast across the county. Steep slopes in a large portion of the county are also at risk of water erosion. The Walla Walla County VSP Work Plan states maintaining “vegetative cover” as a goal for Wind and Water Soil Erosion areas.

Vegetation Change Analysis

With the help of Dr. Amanda Stahl (WSU), in 2021 WWCCD staff conducted a vegetation change analysis using Sentinel-2 Satellite data and processing from the Google Earth Engine (Stahl, 2020). Results showed minimal to no significant change in vegetative cover for the county from 2016 to 2019. This analysis helped develop a baseline for future assessments. WWCCD staff are conducting a vegetation change analysis for the years 2020-2024, to be completed in time for the Walla Walla County VSP 5-Year Report, due in March 2026.

Challenges and Outreach

Dr. Amanda Stahl’s (WSU) *Vegetation Change Analysis* helped answer some vegetative cover questions by showing change in acres of vegetative cover over time (Stahl, 2020). However, during the 5 Year Report, Technical Panel members requested more details on agricultural practices or types of vegetative cover desired in Erosion Areas. Challenges to monitor wind and water erosion areas are stated below.

- These areas encompass a massive part of the county acreage, especially with steeper slopes and higher winds common throughout the county.
- The areas in the county with the highest wind erosion potential are the Burbank and Eureka Flats, which have been the most difficult when it comes to outreach due to larger corporate farming. These areas also have less than 10 inches per year of precipitation which limits vegetation species diversity and growth.
- A significant portion of erodible ground is in CRP. Monitoring and reporting while adhering to USDA confidentiality laws can be challenging.



Figure 7: Example of rolling hills in dryland areas of the county prone to wind and water erosion.

In response to technical panel members’ feedback, WWCCD staff sought technical assistance and advice for improving monitoring efforts for Wind and Water Erosion areas (RCW 36.70A.720 (1)(b)(k)).

- WWCCD staff reached out to Eastern Conservation Districts to assess interest in collaborating with WSU on such efforts. Lengthy conversation about this monitoring and other forms of monitoring took place between WWCCD staff, WSU, WSDA, and the SCC. One conservation district explained work they are doing with WSU for remote sensing and erosion potential. WWCCD staff contacted WSU about opportunities to do similar

tillage/erosion monitoring efforts.

- DNR and the SCC provided information on agricultural practices that impact erosion, information on landslides, and potential erosion modeling (in conversation with a professor at Montana State University).
- Staff reached out to ECY and WSDA to see if state resources provided information on the number of livestock in Walla Walla County. The WSDA also provided information on the soil health initiative.
- A professor at Florida Agricultural and Mechanical University provided information on quantifying erosion and using the Mesh-Marker method.

Landslides/Steep Slopes

Walla Walla County has a vast expanse of mapped steep slope areas, especially in the dryland wheat to the central north and foothills to the east. Walla Walla County's VSP Steep Slope map includes areas with over a 30 percent slope. Walla Walla County's VSP Work Plan uses education and outreach metrics to track Steep Slope and Landslide area enhancement.

The Blue Mountain Land Trust provided WWCCD staff information on conservation easements acquired in this biennium. Refer to the Agricultural Viability section of this report for more information on conservation easements in Highly Erodible Land (HEL), as determined by NRCS.

Challenges and Outreach

Technical panel members questioned the tie between educating producers on landslide risk and protecting those areas. Beyond remote sensing, monitoring for these areas presents some challenges.

- CRP constitutes many Steep Slope areas in the county. The Farm Service Agency is the contracting and regulatory authority for that program. Walla Walla County VSP continues to explore CRP monitoring options that comply with USDA confidentiality laws.
- Steep Slopes encompass a large portion of the north central and foothills portions in the county, making on-the-ground monitoring difficult.



Figure 8: View of steep slopes in the Blues Mountains, Walla Walla County

Outreach for Steep Slopes and Landslide Area fell into the Wind and Water Erosion Areas outreach, as both areas have similar monitoring challenges and erosion issues.

Liquefaction

Liquefaction occurs when the soils behave as a liquid during seismic events. The risk for liquefaction is high in areas with shallow groundwater, seismic faults, and certain soil types. Walla Walla County has many waterways with complex subsurface interactions. Liquefaction risk areas generally overlap with surface waters throughout the county. Walla Walla County VSP Work Plan goals and benchmarks include irrigation efficiency education and outreach as metrics to track liquefaction protection.

Irrigation Efficiencies

Increasing irrigation efficiencies in liquefaction zones may reduce liquefaction risk by reducing soil saturation. The Washington State Department of Agriculture (WSDA) conducts farm surveys to gather farm information, including irrigation data, every couple of years. Staff analyzed changes in the WSDA Ag Land Use Data between 2011 (WSDA, 2011) and 2024 (Demory, 2025). The Walla Walla County VSP Work Plan goal for protecting Liquefaction zones states that there will not be a drop greater than 500 acres of efficiently irrigated ground in mapped liquefaction zones (moderate- to high-risk) between the two watersheds, every 5 years. Because efficient irrigation practices also impact the Critical Aquifer Recharge Areas, in this analysis staff also compared irrigation practices within each WRIA (Cooper, 2025c). Detailed methods for this analysis are saved on the Walla Walla County Conservation District (WWCCD) internal server.

In moderate- to high- risk Liquefaction zones in WRIA 32 in Walla Walla County, there was a net increase of about 2,518 acres irrigated efficiently from 2011 to 2024. In this time span, there was a net decrease of about 2,646 acres using irrigation methods considered inefficient. Most notably, an additional 1,606 acres are being irrigated with Center Pivot, while Sprinkler use declined by 1,996 acres. See Table 1. It is important to note that Sprinkler systems were not separated into “Sprinkler” and “Micro-Sprinkler” until 2013, thus the decline in Sprinkler systems may be partially due a different classification in later years.

*Table 13. Differences in irrigation methods used in mapped zones of moderate- to high-risk liquefaction zones in the Walla Walla Watershed (WRIA 32) in Walla Walla County between 2011 – 2024. For simplicity, Irrigation systems with very little or no presence in these areas were not included in the table, but can be found in the results located on the WWCCD internal server. *Drip/Micro-Sprinkler and Micro-Sprinkler not recorded in 2011.*

Difference in Irrigation Type in Mapped Liquefaction Zones (WRIA 32)				
Irrigation		2011	2024	Net Change
Efficient	None	23202.18	23663.05	460.87
	Drip	270.68	216.50	-54.18
	Drip/Micro-Sprinkler	*0	1.08	1.08
	Micro-Sprinkler	*0	31.19	31.19
	Center Pivot	2380.59	3986.72	1606.12
	Center Pivot/Sprinkler	42.53	515.01	472.48

Inefficient	Wheel Line	3010.27	2066.24	-944.03
	Sprinkler/Wheel Line	142.56	552.55	409.98
	Sprinkler	10963.85	8967.42	-1996.43
	Rill	343.34	146.80	-196.54
	Big Gun/Sprinkler	18.09	102.91	84.82
	Big Gun	146.57	186.71	40.15
	Flood	295.03	251.08	-43.95

Mapped zones of moderate- to high- risk liquefaction zones are minimal in WRIA 33. Thus, changes in irrigation methods in these zones are negligible. There is less than one acre of irrigated land in these zones, with virtually no change between 2011 and 2024. In 2011 and 2024 there was about 600 acres of non-irrigated land in these zones.

Staff assessed irrigation efficiency at the watershed scale, as well as in areas of moderate- to high- risk Liquefaction zones, and found that producers overall are transitioning to more efficient irrigation methods. Watershed-level results can be viewed in the *Irrigation Efficiency in Walla Walla County 2011-2024* document, located on the WWCCD server (Cooper, 2025c).

During the 2023-2025 biennium, WWCCD worked with landowners to implement eight irrigation efficiency upgrades in WRIA 32 through the Irrigation Efficiencies Grant Program (IEGP). These upgrades included seven Center Pivots and one Variable Frequency Drive, which in total irrigate 374 acres and resulted in 4.43 cubic feet/second water savings. With a large increase in efficiently irrigated acres in Liquefaction zones, this analysis satisfies the Walla Walla County VSP Work Plan goal for protecting GHA Liquefaction critical areas.

Challenges and Outreach

During the 5-Year Reporting process, technical panel members argued that outreach and education for liquefaction do not equate to protection. Liquefaction areas pose challenges for monitoring in Walla Walla County, such as:

- The lack of consistent groundwater level data in the county and difficulty analyzing/displaying that data make reporting for protection harder.
- Liquefaction is a large-scale seismic issue. Besides providing feedback on development in a liquefaction zone and tracking irrigation efficiencies, it is challenging to tie agricultural activities to liquefaction protection.

Most of WWCCD's work on liquefaction has been through the Irrigation Efficiency Analysis (Cooper, 2025c). Still, in response to technical panel members' feedback, WWCCD staff sought technical assistance and advice for improving monitoring efforts for areas at risk for liquefaction (RCW) 36.70A.720 (1)(b)(k).

- WSDA staff provided feedback on the feasibility of liquefaction monitoring through a program like VSP.
- Staff at DNR outlined existing information on groundwater level data in Walla Walla County and potential data sources to explore.

- The Washington Water Trust provided WWCCD staff with information on water use/irrigation efficiency outreach and education, as well as information on water rights purchased or leased to the trust (see Table 14).
- The Columbia Snake River Irrigators Association provided information on irrigator compliance with WDFW and NOAA standards for water diversion along the Columbia and Snake River.

Water Quality Monitoring

Water Quality is not a critical area but has important impacts on critical areas in VSP, specifically CARA and stream conditions for Fish and Wildlife Habitat. The SCC and other partner agencies have expressed a desire for increased water quality monitoring and data. The Walla Walla VSP Work Plan includes a water quality component in its Critical Aquifer Recharge Area goals. Partners like the Walla Walla Basin Watershed Council (WWBWC) and Kooskooskie Commons are actively monitoring water quality in the Walla Walla Watershed (WRIA 32).

WWBWC is based out of Milton-Freewater, Oregon and works to enhance, restore, and protect the Walla Walla Watershed for wildlife, farms, and residents. The Walla Walla Basin spans across the Washington/Oregon state border, so while much of WWBWC's work takes place in Oregon, WWCCD finds their work important to include in our assessment of the Walla Walla Watershed. Along with other monitoring efforts and restoration projects, WWBWC regularly monitors stream flow and water temperature in the Walla Walla River Basin. They currently monitor stream flow at 24 sites in the Walla Walla Valley, covering Walla Walla, Touchet, and Milton-Freewater (Adams, 2025a). In conjunction with Kooskooskie Commons, WWBWC also collects water temperature data on the Walla Walla River at over 25 sites, all located on the Oregon side of the basin (Adams, 2025b). To view available data and maps of monitoring sites, visit the Walla Walla Basin Watershed Council website.

WWCCD staff learned more about Water Quality monitoring this biennium, along with some of the challenges and opportunities available to our county.

- Walla Walla County has many waterways, but there are not enough flow stations on those waterways to get consistent data for much of the Walla Walla Watershed. Trying to sort out water quality differences upstream and downstream of urban areas without flow stations at both ends is difficult. Larger waterways in the county preclude staff from gathering flow data without a station through most of the year.
- There is a lack of consistent water quality data. Different organizations have conducted water quality monitoring in the county, but it has been project-specific and insufficient to obtain watershed-significant results or baselines. Gathering data that is statistically significant for the Walla Walla Watershed requires significant uplift.
- Outreach resistance: It may be difficult to convince private landowners to allow WWCCD or partners to conduct water quality monitoring on their property. Smaller outreach efforts have received pushback. However, in 2025 WWCCD and WSDA staff received an outstanding landowner response to free well-water testing (mainly for drinking water).

In response to technical panel members' feedback, WWCCD Staff have conducted immense research to explore different options and determine what others in the region are doing to improve water quality monitoring in Walla Walla County (RCW) 36.70A.720 (1)(b)(k).

Washington Water Trust

Washington Water Trust is a nonprofit organization dedicated to restoring and protecting river and stream flows throughout Washington State to support healthy ecosystems, communities, and agriculture. Using voluntary, market-based approaches, they work with landowners, tribes, farmers, and agencies to lease or purchase water rights, improve irrigation efficiency, and develop sustainable water solutions. Since 2011, they have protected 1,100 acre-feet per year through permanent water right acquisitions in the Walla Walla Watershed (WRIA 32). Prior to 2011, the Washington Water Trust protected up to 671 acre-feet per year in permanent acquisitions in WRIA 32 (N. Lottsfeldt, personal communication, April 21, 2025).

Table 14. Water conserved instream by Washington Water Trust via purchased or leased water rights in Walla Walla County.

Washington Water Trust				
Year	Location	Water Rights Purchased/Leased	Acre-Feet Protected per Year	Cubic Feet per Second (cfs) Saved per Year
2023	Walla Walla River	Permanently Purchased	N/A	1.36
2021-2024	Mill Creek	Leased	N/A	5.5
2023-2024	Touchet River	Combination of Leases and Acquisitions	929.79	9.533
2011-Present	<i>Walla Walla County</i>	Permanent Acquisitions	1,100	N/A
Before 2011	<i>Walla Walla County</i>	Permanent Acquisitions	671	N/A

Lessons Learned

After the previous 5-year report, WWCCD staff have been researching and implementing feasible monitoring programs to bolster VSP reporting. The biggest lesson from this biennium is the challenge of prioritizing watershed monitoring for all critical areas. Achieving significant results for 5 critical areas across two large watersheds exceeds the resource capabilities of the technical lead. WWCCD partners with other agencies to help with monitoring critical areas to meet VSP requirements.

Future Goals

WWCCD will continue to collaborate with the VSP Work Group and county partners to more effectively monitor critical areas in Walla Walla County and adaptively manage the VSP Work Plan. Some future directions include:

Wetlands

- WWCCD staff will assess NRCS Technical Note 14 and Coastal Atlas Map information provided by staff at Department of Ecology for feasibility in

monitoring and map improvement. This information will be shared with Walla Walla County offices for their consideration and adoption.

- Staff will continue partner outreach to solicit monitoring data and reports from known wetlands in the county, and more work will be done to address current limitation of wetland mapping at large scales.

Frequently Flooded Areas

- WWCCD continues to look for different ways to monitor Frequently Flooded Areas and alter the VSP Work Plan to have measurable metrics outside of outreach goals.
- Walla Walla County could use LiDAR to quantify changes in the floodplain with more consistent flights and financial aid. Conservation District staff will examine High Resolution Change Data (HRCDD) as it becomes available in the future.
- Tools and methods utilized by different conservation districts and partners are being explored for feasibility.
- FEMA Region 10 is working on Risk Mapping Assessment and Planning for both Walla Walla and Columbia Counties (FEMA, 2023). The mapping effort started in 2022 and is a 9-year process.

Critical Aquifer Recharge Areas

- WWCCD continues to research feasible ways to monitor the Critical Aquifer Recharge Areas. Groundwater testing requirements for aquifer recharge were reduced by Ecology in 2022, making recharge projects more feasible.
- WWCCD is still working with landowners and Department of Ecology to fund aquifer recharge projects in the county.
- Staff are conducting outreach to see if partners can help with aquifer level or water quality monitoring.
- WWCCD staff and the VSP Work Group will continue brainstorming ways to alter goals and benchmarks to address technical panel feedback.

Steep Slopes and Landslides

- WWCCD is waiting on remote sensing developments, which other partners like the SCC, WSU, and Palouse Conservation District are working on.

Wind and Water Erosion

- Representative, low-cost erosion test plots could be implemented with more resources and statistical assistance.
- Using some public crop data, like WSDA's Agricultural Land Use Geodatabase, could be useful to supplement data for vegetative cover, depending on the year and season surveys took place.

Liquefaction

- Groundwater level was identified through the Walla Walla 2050 process as a data gap (Walla Walla Watershed Management Partnership, 2021). The Department of Ecology and USGS are looking into groundwater level data.
- WWCCD will continue conversations with the Work Group to adapt the liquefaction goal to have more specific metrics and benchmarks to track beyond education.

Water Quality

- WWCCD will also continue to watch for results from other agencies to inform the VSP Work Plan, including from Department of Ecology and a current study by the USGS (Washington Water Science Center, 2020).

The Voluntary Stewardship Program (VSP) offers a proactive and collaborative approach to protecting critical areas while supporting the long-term viability of agriculture. Through the VSP, counties can highlight successful conservation efforts, foster strong partnerships, and increase public awareness of the importance of natural resource stewardship. Over time, VSP has grown into a vital program that serves as a cornerstone for sustainable land management across Washington. The Walla Walla County Conservation District remains fully committed to upholding the principles of VSP—demonstrating measurable protection of critical areas while ensuring the continued success and productivity of local agriculture. With ongoing support and collaboration from technical advisors and community partners, VSP continues to be a powerful example of voluntary, locally driven conservation in action.

Summary Tables

Project Implementation

Table 15: WWCCD Best Management Practices Installed					
2023	Description	BMP	Acres	Stems	
Mill Creek	Riparian	391	4	3225	
Touchet Canopy Cover 1	Riparian	391	20	4617	
2024	Description	BMP	Acres	Stems	
Yellowhawk/Caldwell (one landowner)	Riparian	391	0.13	195	
Caldwell & Yellowhawk Restoration DIP	Riparian	391	1.2	400	
Garrison Creek Restoration DIP	Riparian	391	3.67	1020	
Garrison Creek Suite DIP	Riparian	391	0.66	335	
Taumarson Pond DIP	Riparian	391	2.4	470	
Touchet Canopy Cover 2	Riparian	391	4.5	400	
CREP: Design and imp - reenrollments	Riparian	391	148.74		
Ohima Riparian	Riparian	391	1	450	
Walla Walla Riparian	Riparian	391	1.45	450	
Maintenance	Riparian	391		440	
2025	Description	BMP	Acres	Stems	
Yellowhawk & Lassiter Restoration DIP	Riparian	391	12.59	1200	
Lower Waitsburg Rd Riparian	Riparian	391	2.1	620	
Mojonnier Riparian	Riparian	391	2	345	
Mule Deer Test Plots	Upland Wildlife Habitat Management	645	1.75	Seeded	
			Acres	Stems	
Total			206.19	13727	

Table 16: WWCCD Screens and Meters Installed					
2023	Irrigated Acres	#	Type	BMP	
Yellowhawk Screen	2.6	1	Screen	396	
Yellowhawk Meter	2.6	1	Meter	587	
2024	Irrigated Acres	#	Type	BMP	
Garrison Creek Screen	0.75	1	Screen	396	
Touchet River Screen	20	1	Screen	396	
Yellowhawk Screen	4	1	Screen	396	
Dry Creek Screen	400	1	Screen	396	
Bergevin Williams Screen	180	1	Screen	396	
Bergevin Williams Meters	180	6	Meter	587	

Walla Walla River Screens	450	2	Screen	396
Walla Walla River Meters	450	2	Meter	587
Walla Walla River Meter	225	1	Meter	587
Mud Creek Meter	100	1	Meter	587

Technical Assistance

Table 17: Technical Assistance Requests		
2023		
Type	Units	Quantity
Grass/Erosion	people	4
Riparian	people	6
Flooding	people	1
Flow Meter	people	2
Fish Screen	people	4
2024		
Type	Units	Quantity
Pollinator Habitat	People	4
Irrigation	TA/Inquiries	8
CREP Audit 2024	acres	1600
CREP Audit Inquiries	people	25
Fish Screen	people	10
Flow Meter	people	9
Fish Passage Barrier	people	1
Habitat Planting	people	3
Water Rights	People	2
Riparian	People	24
2025		
Type	Units	Quantity
WSDA Tree of Heaven	people	4
Fish Screens	TA/Inquiries	3
Flow Meters	TA/Inquiries	3
CREP Disease Check	TA/Inquiries	7

Monitoring Completed

Table 18: Monitoring Completed	
2023	
WDFW Ferruginous Hawk Nest Occupancy Rate VSP Work Plan Adaptive Management	
2024	
Fish Screen Audit - WWCCD Flow Meter Audit - WWCCD Wetland Accuracy Audit - WWCCD Ferruginous Hawk Nest Occupancy Rate - WDFW Mule Deer Habitat Ag Activity Audit - WWCCD Fish Passage Barrier Assessment Training - WDFW and WWCCD Fish Passage Barrier Assessments (13) - WWCCD VSP Monitoring Plan - WWCCD WSU Tillage Meeting with Eastern WA Conservation Districts WSU Tillage Outreach Efforts Connected with Local Birders - USFWS	
2025	
Groundwater and Pesticide Well Testing - WSDA Wetland Accuracy Aerial Survey Audit - WWCCD Lower Snake River Irrigators Fish Screen and Flow Meter Compliance - CSRIA Fish Passage Barrier Assessments (8) - WWCCD Barn Owl Box Nest Occupancy – BMAS (Hollopeter, 2025) Irrigation Efficiency Analysis - WWCCD Ferruginous Hawk Territories in CRP - WWCCD Mule Deer Habitat in CRP - WWCCD	

Education and Community Outreach

Table 19: Education			
2023			
Affiliation	Program	Attendance	Type
WWCCD	Sharpstein Elementary	70	Students
	Eco-Restoration Volunteer	20	Students
	Outdoor explorer backpacks	19	Students
Touchet School District	Explore the Outside	80	Students
Blue Mountain Land Trust	Nature Kids	1100	Youths
Tri-State Steelheaders	Salmon in Schools	1700	Students
2024			

Affiliation	Program	Attendance	Type
WWCCD	WA-Hi STEM talk	20	Students
	Wa-Hi Envirothon Club	6	Students
	WA state Envirothon	53	Students
	Dixie Elementary	20	Students
	Sharpstein Elementary	60	Students
	Wheat Week	267	Students
	College Place High School: career fair	220	Students
	Whitman College presentation & field trip/tour	20	Students
WWCCD and Tri-State Steelheaders	Whitman Stream Team & High School Student Volunteer Day	18	People
Tri-State Steelheaders	Salmon in Schools	1700	Students
2025			
Affiliation	Program	Attendance	Type
WWCCD	Wa-Hi Envirothon Club	9	Students
	Dixie Elementary	20	Students
	Wheat Week	142	Students
	WWCC Political Ecology of Ag & Natural Resources	11	Students
	Wa-Hi FFA	6	Students
	WWPSF 5th Grade Outdoor Education	40	Students
	WWPSF 6th Grade Outdoor Education	384	Students
	5th Grade	102	Students
Tri-State Steelheaders	Salmon in Schools	1700	Students
	Whitman Stream Team	70	Students

Table 20: Community Events		
2023		
Affiliation	Event	Attendance
WWCCD	Kiwanis	10
	VSP-County Commissioner Meeting	5
2024		
Affiliation	Event	Attendance
WWCCD	Annual meeting	35
	WWCC Career Fair	100
	Return-to-the-River Salmon Festival	50
	WW County Fair Booth	50
	Conservation Conversations	65
	WWBWC Water & Wine	25
	WW2050 Open house	30

	NRCS Local Workgroup Meeting	10
	AAUW State Meeting	48
	Soil pH trial OSU, WSU, WSU Ext, Private, chemical companies	14
	Tour - Port of WW Commissioner	1
	Fire District #8 (Dixie) meeting (Firewise)	23
	Fire District #4 (Mill Creek) meeting(Firewise)	12
	Burbank Garden Club	9
	VSP - County Commissioner	8
	Riparian Maintenance Workshop	25
	Riparian Maintenance Field Trip	8
	Rainfall Gatherers	39
2025		
Affiliation	Event	Attendance
WWCCD	Annual meeting	45
	Farmer Mini-Sessions	30
	Return-to-the-River Salmon Festival	450
	Kiwanis	9
	Whitman Public Outreach Event	35
WWBWC & WWCCD	Water & Wine and Pub Trivia Events	170
	Floodplains Presentation	4
NRCS	NRCS Local Workgroup Meeting	25

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